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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,622	12/05/2003	Tadanobu Shibabuki	Q78685	9136
23373	7590	09/14/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			JOERGER, KAITLIN S	
			ART UNIT	PAPER NUMBER
			3653	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/727,622	SHIBABUKI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kaitlin S. Joerger	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 December 2003.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 05 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 12/5/03.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term “highly rigid” is a relative term and does not clearly define the applicant’s invention. The examiner is unclear as to exactly how rigid the suction cups are. In addition the claim defines the highly-rigid suction cups with respect to other suction cups. The does not provide a definite understanding of the actually rigidity and only describes the relative rigidity compared to less rigid cups.

Further claims 7 and 8 state that the device comprises a pressure reducer that reduces the pressure of “the respective suction cups”. The examiner is unclear as to what cups the applicant is referring when they mention “the respective suction cups”.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 62215441.

The '441 patent teaches a sheet sucking/feeding device which sucks a sheet and separates the top sheet from a stack of sheets, the device comprises: a plurality of suction cups, 66a-66e, along a transverse direction of a sheet; and a suction cup operation device which can displace at least one suction cup over a predetermined stroke in an axial direction, and displaces at least one suction cup to cause a sucked sheet to curve wavily along the transverse direction, see figure 4a-4d. The suction cup operation device comprises actuators connected to the respective suction cups, the suction cup operation device displaces the suction cups by simultaneously driving at least every other one of the actuators, wherein every other one comprises a group of actuators. The operation device further comprises a cam mechanism having cams, 54a-54e. The actuators are structured to include solenoids, 28 and 48, the actuators are connected to shafts of the suction cups via lift-up levers 60a-60e, and the actuators are disposed together to form a single unit. The device further includes springs, 12a-12e.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 14-17 rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62215441.

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Although the '441 patent does not explicitly teach a method of sucking and feeding a sheet, it would have been obvious to perform the method steps of claims 14-17 when using the apparatus taught by the '441 patent in its usual and expected fashion.

The '441 patent teaches individually reducing the pressure of the suction cup and it is an inherent feature of suction cups that when the pressure is reduced or increased the skirt of the suction cup will deform.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62215441 in view of Dachtler.

The '441 patent does not teach suction cups of different rigidity which are subjected to different level of pressure at different times, but Dachtler does teach this, see columns 4 and 5. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the highly-rigid and less-rigid suction cups and the pressure changer of Dachtler with the device of the '441 patent if one wanted to be able to ensure separation of the top most plate from the stack.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62215441 in view of Dachtler.

Although neither the '441 nor Dachtler explicitly teach a method of sucking and feeding a sheet, it would have been obvious to perform the method steps of claims 18-20 when using the apparatus taught by the combination of the '441 patent and Dachtler in its usual and expected fashion.

Art Unit: 3653

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaitlin S. Joerger whose telephone number is 571-272-6938. The examiner can normally be reached on Monday - Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 571-272-6944. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksi  
  
8 September 2005

  
DONALD S. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600